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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,193	09/12/2002	Hans Bleckmann	AP9714	1517

10291 7590 11/20/2003

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BLOOMFIELD HILLS, MI 48304-0610

EXAMINER

DAVIS, OCTAVIA L

ART UNIT	PAPER NUMBER
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2855

DATE MAILED: 11/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/088,193

Applicant(s)

BLECKMANN ET AL.

Examiner

Octavia Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 8/18/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 14-22 is/are pending in the application.
- 4a) Of the above claim(s) 15 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14, 16, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) 17-20 and 24-26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

*Claim Objections*

1. In claims 14 and 16, "driving behavior" and "vehicle movement behavior" lack antecedent basis.

Also, claims 17 – 20 and 24 – 26 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

~~Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form. These claims depend from respective independent claims 15 and 23 of which are presently cancelled.~~

*dependent on 2 cancelled claims*

*Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 14, 16, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Latarnik et al in view of Parker et al.

Regarding claim 14, Latarnik et al disclose a process for controlling the driving behavior of an automotive vehicle comprising a vehicle 2 provided with a tire sensing system 3 detecting a wheel loading, measuring a signal generated by the sensor and using that signal as a reference value to determine the presence of a transverse force on the wheel (See Col. 3, lines 21 – 27 and

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## DETAILED ACTION

### *Claim Objections*

1. In claims 14 and 22, “ driving behavior ” and “ vehicle movement behavior ” lack antecedent basis.

Also, claims 17 – 20 and 24 – 26 are objected to under 37 CFR 1.75(c), as being dependent on a cancelled claim.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 14, 16, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Latarnik et al in view of Parker et al.

Regarding claim 14, Latarnik et al disclose a process for controlling the driving behavior of an automotive vehicle comprising a vehicle 2 provided with a tire sensing system 3 detecting a wheel loading, measuring a signal generated by the sensor and using that signal as a reference value to determine the presence of a transverse force on the wheel (See Col. 3, lines 21 – 27 and

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30 – 34) but does not disclose operating the sensor under predetermined conditions that result in minimal lateral forces exerted upon the rotating encoder. However, Parker et al disclose an improved drive system incorporating wheel balancers comprising a spindle 13 having a wheel/tire assembly 17 attached and force sensors 19, 21 coupled to the spindle, mounted on the spindle is an encoder 15 (See Col. 5, lines 17 – 35).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Latarnik et al according to the teachings of Parker et al for the purpose of, providing speed and rotational position information to a motor control circuitry (See Latarnik et al, Col. 5, lines 19 – 26 and 63 – 65).

Regarding claim 16, Latarnik et al lack the signal being a sinusoidal alternating current signal and the determination unit determining the nominal value with each marking of the encoder. However, in Parker et al, a signal processing means 23 performs signal processing on the output signals of the force sensors 19, 21 and controls keeps track of spindle position from the encoder, the signals from the sensors being supplied through circuitry 37, 39 to an ADC 35 and to filters the make up part of the circuitry (See Cols. 5 and 6, lines 62 – 65 and 14 – 24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Latarnik et al according to the teachings of Parker et al for the purpose of, utilizing a control circuit that is connected to a sensor assembly and that is responsive to the measured rotation of the shaft (See Parker et al, Col. 4, lines 5 – 18).

Regarding claim 21, in Latarnik et al, the nominal value is maintained until the predetermined driving behavior is detected (See Col. 4, lines 4-11).

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Regarding claim 22, in Latarnik et al, the model 1 sets the operating point of the output signal of the pick-up irrespective of the air gap and determines the nominal value, the transverse forces and attributes the amplitude variations (See Col. 3, lines 21 – 25).

### ***Response to Arguments***

4. Applicant's arguments filed 8/18/03 have been fully considered but they are not persuasive. In response to applicant's arguments that the references do not disclose calculating nominal preset values when the vehicle exhibits stationary driving behavior it is the examiners position that in Latarnik et al, Col. 4, lines 1 – 11, the nominal yaw moment MG is converted in a wheel force distributor 6 into nominal wheel forces F to be applied to the wheels, the actual forces correspond to the measured forces F<sub>meas</sub> that are detected by the sensors 3, the differential forces from these two values are computed in a wheel force regulator 7 into brake pressures ( vehicle movement control means ) which act upon the vehicle 2 resulting in new changed force conditions and wheel speeds on the vehicle, thus this reference still stands.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Matsumo et al (6,219,609) teaches a vehicle dynamic control system.

Hadeler et al (5,455,770) teaches a vehicle movement dynamics control system.

Nakamura et al (5,408,411) teaches a system for predicting behavior of automotive vehicle and for controlling vehicular behavior.

Drahne et al (5,913,240) teaches a method and device for controlling slip.

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6. Any inquiry concerning this communication should be directed to examiner Octavia Davis at telephone number (703) 306 - 5896. The examiner can normally be reached on Monday - Thursdays (9:00 - 5:00), Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz, can be reached on (703) 305 - 4816. The fax phone number for the organization where this application where this application or proceeding is assigned is (703) 746 - 4409.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 0956.

OD/2855

11/11/03

  
EDWARD LEFKOWITZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800